

AMENDMENTS TO THE CLAIMS

55. (CURRENTLY AMENDED) An isolated sweet taste receptor comprising a T1R3 polypeptide, wherein the T1R3 polypeptide is encoded by a nucleotide sequence that ~~hybridizes under moderately stringent hybridization conditions has at least 90% sequence identity~~ to a nucleotide sequence encoding an amino acid sequence of SEQ ID NO: 15, 20, 23, or 25.

56. (CANCELLED)

57. (CURRENTLY AMENDED) The isolated receptor of claim 55, wherein the T1R3 polypeptide has an amino acid sequence of SEQ ID NO: 15, 20, 23, or 25.

58. (PREVIOUSLY PRESENTED) The isolated receptor of claim 55, wherein the receptor comprises a T1R3 polypeptide and a heterologous polypeptide.

59. (PREVIOUSLY PRESENTED) The isolated receptor of claim 58, wherein the T1R3 polypeptide and the heterologous polypeptide are non-covalently linked.

60. (PREVIOUSLY PRESENTED) The isolated receptor of claim 58, wherein the T1R3 polypeptide and the heterologous polypeptide are covalently linked.

61. (CURRENTLY AMENDED) The isolated receptor of claim 58, wherein the heterologous polypeptide is a T1R2 polypeptide that is encoded by a nucleotide sequence that ~~hybridizes under moderately stringent hybridization conditions has at least 90% sequence identity~~ to a nucleotide sequence encoding an amino acid sequence of SEQ ID NO: 7, 8, or 9 or 8.

62. (CANCELLED)

63. (CURRENTLY AMENDED) The isolated receptor of claim 62, wherein the T1R2 polypeptide has an amino acid sequence of SEQ ID NO: 7, 8, or 9 or 8.

64. (PREVIOUSLY PRESENTED) The isolated receptor of claim 55, wherein the receptor has G protein coupled receptor activity.

65. (CURRENTLY AMENDED) The isolated receptor of claim 55, wherein the receptor specifically binds to antibodies raised against SEQ ID NO: 15-20, 23, or 25.

66-88. (CANCELLED)